

## REMARKS/ARGUMENTS

### *Election/Restrictions*

Claims 1-14 are elected for further prosecution in this application without traverse. Claims 15 through ~~45~~<sup>6</sup> are hereby withdrawn pending the Examiner's notice of allowable subject matter as to the remaining claims.

### *Claim Rejections - 35 USC §103*

Claims 1, 3-10 and 12-14 are pending in this application. Claims 1 and 3-4 have been amended by way of the present amendments to clarify the present invention. Claims 2 and 11 are hereby cancelled.

The rejection of claims 1-14 under 35 U.S.C. §103(a) as being unpatentable over Locke et al. (U.S. Patent No. 5,756,020) in view of Reinerhr et al. (U.S. Patent No. 4,087,494) and Hixon et al. (U.S. Patent No. 5,445,653) is respectfully traversed in view of the amendments made to claims 1 and 3-4, and cancellation of claims 2 and 11.

Locke et al. teaches a process for producing a large variety of solution dyed articles that are extruded from thermoplastic polymers by mixing different colorants continuously to the extruder (column 1 lines 10-15 and Fig. 1). Particularly, Locke et al. discloses that colored "Weathered Tan" fibers contain about 0.46 weight percent of the total pigment based on weight of fiber in the example at column 4.

However, Locke et al. nowhere discloses, as recited in claim 1:

.....wherein the total pigment loading level comprises  
about 10 to about 1000 ppm by weight of the fiber.  
(emphasis added).

That is, the colored solution dyed nylon yarns disclosed by Locke et al. are distinctly different from the off-white pigmented yarns recited in claim 1 of the present invention. The yarns disclosed by Locke et al. have visible color shades because of high concentration of the pigment.

Reinerhr et al. discloses overdyeing the pigmented acrylic fibers with carbon black. The rejection of claims 1-14 under 35 U.S.C. §103(a) as being unpatentable over Reinerhr et al. has been obviated by the amendment made to the claims. Reinerhr et al. states that the shades of pigmented fibers are only limited with a grey component and the technique cannot produce any light yellow, red, or green shades (column 1 lines 42-46). In contrast, the shade

of the present invention is lightly "off white". Thus Reinerhr et al., furthermore, teaches away from the present invention.

The Examiner stated that black pigment can be formed by mixing blue, red and yellow from the trichromatic system of dyeing. Office Action page 5. The three colors usually cannot be combined to create a true black because none of the three colored pigments will absorb all wavelengths. Thus, mixing blue, red and yellow cannot easily generate "true black". Actually, in the dyeing industry, black pigment is typically used instead of trying to create a black pigment from a mixture of the three colored pigments to generate dark shades.

As described by the Examiner in Office Action pages 4-5, a chemical engineer in the solution dyeing art can add more colors using the invention of Hixon et al. combined with the technique taught by Locke et al. to make a larger variety of colored shades of nylon yarns. But over dyeing colored pigmented yarns is still limited to the same or similar color of the original pigmented yarns to obtain uniformed deep-dye yarns. In contrast, the "off-white" pigmented yarns in the present invention have very light shades so it is easy to over dye using a selection from among many colors. As described in the present application, the colors required by the customers in the market change all the time so the cost of manufacture and inventory maintenance increases dramatically as the number of available colors increases. Therefore, pigmented fibers of the prior art are not well suited for use in efficiently producing a wide variety of substantially uniform color carpets.

On the other hand, the traditional acid dye technique can overcome the problem of having to maintain a substantial color inventory. But, the acid dyed nylon carpets of the prior art have very poor color and light fastness properties. The present invention not only reduces unnecessary inventory of pigmented yarns, but it also provides improved color and dye light fastness properties similar to that provided in articles manufactured with colored pigmented yarns.

The Examiner points out that a chemical engineer in the solution dying art will adjust the amount of pigment to achieve the desired shading effects as disclosed in claim 1. Office Action at page 5. The prior arts disclose adding sufficient pigments into the polymer to make colored yarns and over dyeing the colored yarns to make deep shades. The pigments are taught to be used for adding color shades in nylon yarns. However, none of the prior arts references suggests explicitly or implicitly the benefits that can be derived from making the lightly "off-white" pigmented yarns of the present invention. Thus, the chemical engineer

would not reduce the amount of pigment to the extent required for producing an "off-white" yarn without having a reasonable expectation of achieving the benefits discovered by Applicant.

Therefore, one of ordinary skill in the art would not be motivated to use the process taught by either Reinerher et al. or Hixon et al. to make "off-white" pigmented nylon yarns and then overdyed the yarns to achieve any of a variety of color shades not seen before.

As stated by the Federal Circuit, "proper analysis under 35 U.S.C. § 103 requires, *inter alia*, consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success". *In re Vaeck*, 947 E.2d 488, 483 (Fed. Cir. 1991). In addition, the prior art reference(s) must teach or suggest all of the claim limitations. The teaching or suggestion to combine and the reasonable expectation of success must both be found in the prior art, and not in Applicant's disclosure. *Id.* at 493. See also M.P.E.P. §2142.

Because all of the limitations of the claimed invention of the independent claim are not taught by Locke et al., Reinerhr et al., and/or Hixon et al., and further because neither Reinerhr et al. nor Hixon et al. overcomes the deficiencies of Locke et al. with respect to claim 1, and its dependant claims, a prima facie case of obviousness has not been presented, and the rejection should be withdrawn.

**CONCLUSION**

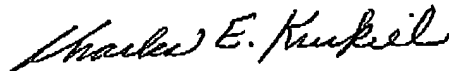
This is meant to be a complete response to the Office Action mailed on November 9, 2005. Applicant respectfully submits that each and every rejection of the claims, as now pending, has been overcome, and that such claims are now in a condition for allowance. Favorable action is respectfully solicited.

Should the Examiner have any questions regarding this Amendment, or the remarks contained herein, Applicant's attorney would welcome the opportunity to discuss such matters with the Examiner.

Enclosed is a petition for a one-month extension of time, along with a Fee Transmittal Authorizing the Director to debit our Deposit Account No. 50-3323 in the amount of \$120.00 to cover the required fee under 37 CFR 1.17.

Applicants believe no further fees are due. Nevertheless, should the Director determine that any other fees are due before the Examiner may consider this paper, such as a fee for a further extension of time such extension is requested and the Director is authorized to debit our Deposit Account No. 50-3223 for the fee amount.

Respectfully submitted,



**CHARLES E. KRUKIEL**  
ATTORNEY FOR APPLICANT  
Registration No.: 27,344  
Invista North America s.à r.l.  
Customer No. 43693  
2801 Centerville Road  
Wilmington, Delaware 19808  
Telephone: (302) 683-3317  
Facsimile: (302) 683-3473  
Email: charles.e.krukiel@invista.com

Dated: February 15, 2006